

What Is Claimed Is:

1. A foot assembly for a weighing scale comprising:  
a base;  
a ring arranged in coaxial spaced relation to said base; and  
a plurality of deformable compensation beams projecting outwardly from a portion of said base so as to support said ring.
2. The foot assembly according to claim 1 wherein said plurality of beams comprise a compound curve contour.
3. The foot assembly according to claim 1 wherein said ring is an annular ring and includes at least two through-holes and at least two recesses that are arranged in circumferentially spaced relation to one another.
4. The foot assembly according to claim 1 wherein each beam has a first end that is fixedly clamped to said base and a second end that is fixedly clamped to said ring such that each second end is at a location on said ring that is circumferentially spaced away from the location on said base at which said first end is fixedly clamped.
5. The foot assembly according to claim 4 wherein said locations on said ring at which each second end is fixedly clamped correspond to at least one of a through-hole and a recess.

6. The foot assembly according to claim 1 wherein said base includes at least one blind opening sized to receive a portion of a pier that includes a leg that projects downwardly from a plate and a slot that is defined in said plate and that terminates in a knife-edge support.

7. A weighing scale comprising:  
a platform coupled to a mounting tray, said mounting tray including a plurality of apertures;  
a plurality of force transfer beams; and  
a plurality of foot assemblies positioned within said apertures and operatively interconnected to said plurality of force transfer beams, each of said foot assemblies including a base having a plurality of deformable compensation beams projecting outwardly from said base to support a ring that is coupled to said mounting tray.

8. A weighing scale according to claim 7 wherein each base of said foot assemblies includes a cylindrical wall with said ring arranged in coaxial spaced relation.

9. A weighing scale according to claim 8 wherein said ring is an annular ring and includes at least two through-holes and at least two recesses that are arranged in circumferentially spaced relation to one another.

10. A weighing scale according to claim 7 wherein said plurality of deformable beams are arranged in circumferentially spaced relation to one another around the circumference of said ring.

11. A weighing scale according to claim 7 wherein each deformable beam has a first end that is fixedly clamped to said base and a second end that is fixedly clamped to said ring such that each second end is at a location on said ring that is circumferentially spaced away from the location on said base at which said first end is fixedly clamped.

12. A weighing scale according to claim 11 wherein said locations on said ring at which each second end is fixedly clamped correspond to at least one of a through-hole and a recess.

13. A weighing scale according to claim 7 wherein each of said deformable beams comprises a compound curve contour.

14. A weighing scale according to claim 7 wherein said base includes at least one blind opening sized to receive a portion of a pier that supports at least one of said force transfer beams.

15. A weighing scale according to claim 14 wherein said pier includes a leg that projects downwardly from a plate and a slot that is defined in said plate and that terminates in a knife-edge support for at least one of said force transfer beams.

16. A weighing scale comprising:

a platform operatively coupled to a plurality of foot assemblies, each foot assembly comprising:

a base having a bottom surface for contacting a portion of a floor;

a retaining member arranged in spaced relation to the base; and

a plurality of deformable compensation beams projecting outward from a portion of the base to support the retaining member;

a plurality of force transfer beams arranged to operatively interconnect to said plurality of foot assemblies;

a mounting portion coupled to a bottom surface of said platform and associated with each of said plurality of foot assemblies;

wherein in response to a force applied to a top surface of said platform, said force is translated to said mounting portion engaging said bottom surface without said platform contacting said force transfer beams, to cause a downward force to be applied to said foot assemblies, and wherein said deformable beams tend to locate said applied force at a central position where said foot assemblies engage said force transfer beams.

17. The weighing scale according to claim 16 wherein said mounting portion comprises a mounting tray having a plurality of apertures for receiving said foot assemblies.

18. The weighing scale according to claim 17 wherein said mounting tray includes a raised perimeter portion which engages said bottom surface of said platform.

19. The weighing scale according to claim 17 wherein said mounting tray includes a plurality of slots for receiving corresponding ends of said force transfer beams.

20. The weighing scale according to claim 16 wherein said deformable beams comprises a compound curve contour.

21. The weighing scale according to claim 16 wherein said base includes at least one blind opening sized to receive a portion of a pier associated with said force transfer beams.